AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A prosthetic device for insertion into a joint cavity of a joint of a vertebrate, such as a human, said device consisting of a biocompatible material comprising at least a first polymeric component and a second polymeric component, wherein the chain length of the first polymeric component is longer than the chain length of the second polymeric component, and wherein said first and second polymeric components are not polytetrafluoroethylene or polyurethane, and wherein said first polymeric component has a carbon-backbone.

2. (Cancelled).

3. (previously presented) The prosthetic device according to claim 1, wherein the first polymeric component and the second polymeric component are compounded to form a bidispergent system.

4. (previously presented) The prosthetic device according to claim 1, wherein the first polymeric component is selected from polyacrylates, polystyrene, polyethers, polyvinylalcohol, polyethylene, and polypropylene.

5. (previously presented) The prosthetic device according to claim 1, wherein the second polymeric component is selected from polyacrylates, polystyrene, polyethers, polyvinylalcohol, polyethylene, and polypropylene.

6. (previously presented) The prosthetic device according to claim 1, wherein the second polymeric component is cross-linked.

7. (previously presented) The prosthetic device according to claim 1, wherein the first and the second polymeric component comprises the same monomeric component.

8. (previously presented) The prosthetic device according to claim 1, comprising a third polymeric component, said third polymeric component being different from the first and/or the second polymeric component.

9. (original) The prosthetic device according to claim 8, wherein the third polymeric component is selected from polyethylene oxides, and polyvinylpyrrolidone.

10. (previously presented) The prosthetic device according to claim 8, wherein the third polymeric component is grafted to the first and/or the second polymeric components.

11. (previously presented) The prosthetic device according to claim 1, wherein the chain length of the first polymeric component is above 100 monomer units.

12. (original) The prosthetic device according to claim 1, wherein the first polymeric component comprises a copolymer of polyethylene and polypropylene, and the second polymer is grafted to the first polymer.

13. (original) The prosthetic device according to claim 1, wherein the first polymeric component is a cross-linked polymer, and the second polymer is grafted to the first polymer.

14. (original) The prosthetic device according to claim 12, wherein the second polymeric component is selected from polyethylene oxides, and polyvinylpyrrolidone.

15. (Cancelled) A prosthetic device for insertion into a joint cavity of a vertebrate such as a human, wherein the body of the device comprises a polymer material, and wherein the device comprises a hole extending through the body of the device.

16. (Original) A prosthetic device according to claim 2, wherein the device further comprises a slit in the body of the device extending through the body of the device from the surface of the body to the hole.

17. (original) A prosthetic device according to claim 2, wherein the device further comprises a means of enabling a passage through the body of the device to the hole.

18. (previously presented) A prosthetic device according to claim 1, wherein said device is adapted to alleviate conditions associated with worn cartilage by providing a spacer function and/or to exert pressure distribution in the joint when the joint is loaded and/or to provide at least part of the sliding/rotating movement of the joint by internal movement of at least part of the device.

19. (previously presented) A prosthetic device according to claim 1, wherein the device is capable of locking itself to an

intra-articular component and thereby being fixed or retained in the joint cavity in a manner which is substantially non-invasive with respect to cartilage and bone natively present in the joint cavity.

20. (previously presented) A prosthetic device according to claim 1, wherein the polymer material is obtained by cross-linking polyethylene, polypropylene or polyvinylpyrrolidone or combinations or co-polymers thereof.

21. (original) A prosthetic device according to claim 7, wherein the cross-linking is achieved with radiation.

22. (original) A prosthetic device according to claim 8, wherein the forms of radiation are selected from the group comprising high-energy electrons, gamma rays, photons, microwaves, and thermal radiation.

23. (previously presented) A prosthetic device according to claim 1, wherein the polymer material meets mechanical properties in that the E modulus (Young's modulus) is at least 10 MPa.

24. (previously presented) A prosthetic according to claim 1, wherein the device comprises more than one more unit.

25. (original) A prosthetic device according to claim 11, wherein the units are adapted not to interfere with intra-articular components when the device is in the joint cavity.

26. (original) A prosthetic device any of the according to claim 11, wherein the body of the unit further comprises a hole extending through the body of the device.

27. (original) A prosthetic device according to claim 13, wherein the body of the unit further comprises a slit extending from the surface of the body to the hole.

28. (previously presented) A prosthetic device according to claim 1, wherein the polymer is subjected or further subjected to surface treatment to obtain optimised wetting ability and to obtain biocompatibility and resistance to heat treatment for sterilisation.

29. (Cancelled) A prosthetic device according to claim 15, wherein the surface treatment results in a material with critical surface tension (γ_c) values within the "zone of biocompatibility" of 20-30 dynes/cm.

30. (previously presented) A prosthetic device according to claim 1, which is capable of locking itself to the intra-articular component by at least one element of the device surrounding the component in such a manner that displacement of the element is limited by interlocking with said component.

31. (original) A prosthetic device according to claim 30, wherein the element completely or substantially completely surrounds an intra-articular component being a ligament.

32. (previously presented) A prosthetic device according to claim 1, which device, when present *in situ*, comprises at least one ring-shaped element.

33. (previously presented) A prosthetic device according to claim 1 for the articulation of a hip of a human, which device is adapted so that it, when present *in situ* in the human hip joint

cavity, comprises at least one element surrounding ligamentum capitis femoris.

34. (previously presented) A prosthetic device according to claim 1, in which the element which is adapted to surround the ligament when present *in situ*, has such a shape and such properties that it can be placed around the ligament and, when placed around the ligament, will stay interlocked with the ligament.

35. (previously presented) A prosthetic device according to claim 1 which is a hip endoprothese and wherein the element has a shape and properties permitting arranging the element around ligamentum capitis femoris.

36. (previously presented) A prosthetic device according to claim 30, wherein the element, when present *in situ*, permits the ligament to extend through the element and substantially exert its natural function on the joint.

37. (previously presented) A prosthetic device according to claim 1, having such shape and/or properties that it is capable of replacing or supplementing worn or damaged cartilage in the joint and/or is capable of preventing wear of the native cartilage of the joint.

38. (previously presented) A prosthetic device according to claim 30, wherein the element surrounding the intra-articular component constitutes the device.

39. (previously presented) A prosthetic device according to claim 1 wherein the shape of the device mating the load bearing part of the joint is substantially circular.

40. (original) A prosthetic device according to claim 39, wherein the diameter of the device in situ and when the joint is loaded is such that it substantially covers the surface area of the load bearing part of the joint which in the normal joint is covered with cartilage.

41. (original) A prosthetic device according to claim 40, wherein the joint is the hip joint, and wherein the diameter of the device is such that the surface of caput femoris is substantially covered when the joint is loaded.

42. (original) A prosthetic device according to claim 39, wherein diameter of the device is between 15-80 mm, such as between 25-70 mm, preferable between 30-60 mm, more preferable between 35-50 mm, most preferred about 40 mm, when the joint is loaded.

43. (previously presented) A prosthetic device according to claim 1, wherein the thickness of the device is between 2-60 mm, such as between 6-40 mm, preferable 8-30 mm, more preferable about 10-20 mm, most preferable about 15 mm in the unloaded stage.

44. (previously presented) A prosthetic device according to claim 1, wherein the device comprises parts overlapping each other.

45. (original) A prosthetic device according to claim 44, wherein the overlapping parts, on their mating surfaces have an interlocking surface structure.

46. (original) A prosthetic device according to claim 45, wherein the interlocking surface structures constitute grooves.

47. (original) A prosthetic device according to claim 46, wherein the interlocking surface structures are grooved in a radial direction.

48. (original) A prosthetic device according to claim 46, wherein the interlocking surface structures are grooved in a circular direction.

49. (original) A prosthetic device according to claim 45, wherein the interlocking surface structures constitute elevations and corresponding depressions.

50. (previously presented) A prosthetic device according to claim 1, wherein the E modulus (Young's modulus) of the material of at least part of the device is at least 10 MPa, such as at least 13 MPa, preferably at least 16 MPa, more preferable at least 19 MPa, still more preferable at least 22 MPa, most preferable at least 25 MPa, such as at least 30 MPa or 50 MPa.

51. (previously presented) A prosthetic device according to claim 1, wherein the material constituting the device comprises polypropylene, preferably cross-linked polypropylene.

52. (original) A prosthetic device according to claim 32, wherein the ring-shaped element has a shape of a horseshoe, a torus, or a curl.

53. (original) A prosthetic device according to claim 52, wherein the ring-shaped element has an upper convex shape and a lower concave shape.

54. (cancelled) A method for introducing a prosthetic device into a joint comprising locking the device to an intra-articular component, thereby fixing or retaining the device in the joint cavity in a manner which is substantially non-invasive with respect to cartilage and bone natively present in the joint cavity.

55. (cancelled) An instrument device for inserting a prosthetic device according to claim 1, comprising means for deforming the prosthetic device into a reduced volume or a slender shape and means for grasping the intraarticularintra-articular component to which the device is capable of interlocking.

56. (previously presented) The use of a prosthetic device for establishing slidability and/or distributing pressure in a joint of a vertebrate such as a human, by inserting into the joint cavity of the joint a prosthetic device, preferably a prosthetic device as defined in claim 1, capable of locking itself to an intraarticularintra-articular component and thereby being fixed or retained in the joint cavity in a manner which is substantially non-invasive with respect to cartilage and bone natively present in the joint cavity.

57. (previously presented) A method for establishing slidability and/or pressure distribution in a joint of a vertebrate such as a human, comprising inserting into the joint cavity of the joint, a prosthetic device, preferably a prosthetic device as defined in claim 1, which is capable of locking itself to an intraarticularintra-articular component and thereby being fixed or retained in the joint cavity in a manner which is substantially non-invasive with respect to cartilage and bone natively present in the joint cavity.

58. (cancelled) A kit comprising: a) an intra-articular prosthetic device for a joint having a.1) a spacer function and/or capability to exert pressure distribution and/or sliding/rotating movement of the joint by internal movement of the device by means of a resilient member, and a.2) a locking mechanism adapted to fix the device to an intra-articular component by means of an element of the device surrounding the component in such a manner that displacement of the device is limited by inter-locking with the component; and b) an instrument for inserting the prosthetic device into a joint cavity.

59. (cancelled) The kit according to claim 58 wherein the instrument of b) comprises one or more of the following means b.1 to b.4: b.1.) means for deforming the prosthetic device into a reduced volume or to a slender shape and keeping this volume or shape upon introduction of the device to the joint, b.2.) means for grasping or encircling the intra-articular component to which the element of the prosthetic device is capable of inter-locking, b.3.) means for leaving the prosthetic device in the joint with the element of the prosthetic device surrounding the intra-articular component.

60. (cancelled) A kit according to claim 58, wherein the instrument further comprises a handle.

61. (cancelled) A kit according to claim 59, wherein one or more of the means of b.1.), b.2.), and b.3.) are connected to or forms part of a handle.

62. (cancelled) A kit according to claim 58, wherein the resilient member of a.1) and the element surrounding the intraarticularintra-articular component of a.2) constitutes a solid prosthetic device.

63. (cancelled) A kit according to claim 58, wherein the intra-articular prosthetic device is a prosthetic device for insertion into a joint cavity of a joint of a vertebrate, such as a human, said device consisting of a biocompatible material comprising at least a first polymeric component and a second polymeric component, wherein the chain length of the first polymeric component is longer than the chain length of the second polymeric component.